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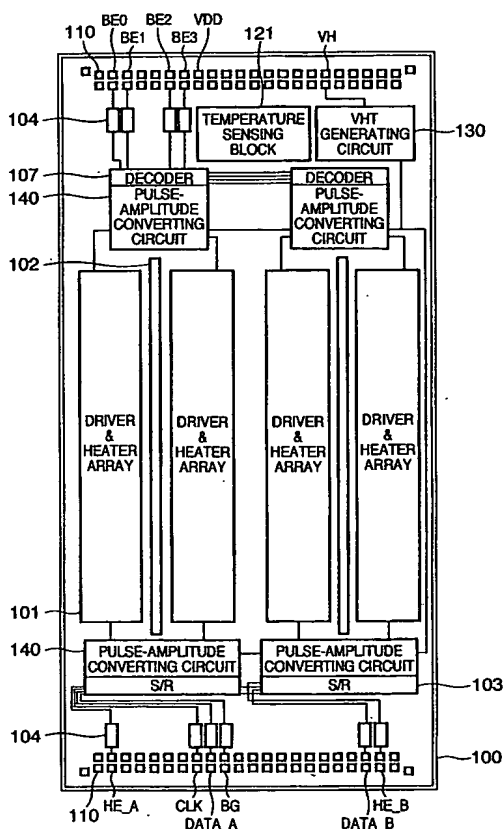
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(54) Title: **INK-JET PRINthead SUBSTRATE, DRIVING CONTROL METHOD, INK-JET PRINthead AND INK-JET PRINTING APPARATUS**



(57) Abstract: A heater/driver array that includes heaters for generating thermal energy utilized to discharge ink and driver circuits for driving these is mounted on a substrate. The heaters are formed into a plurality of groups and are driven by block drive on a per-group basis. A block selection signal of driving-signal voltage level (VHT) and a heater driving signal corresponding to a selected block are generated based upon a print data signal, which has been input at a logic-signal voltage level (VDD), in any of an input circuit, shift register circuit and decoder circuit. The heater/driver array drives the heaters in accordance with the block selection signal and heater driving signal of the driving-signal voltage level.

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